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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/991,211 | 11/21/2001 | Timothy E. Benson | 6241.N DVI | 4477 |

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EXAMINER

STEADMAN, DAVID J

ART UNIT PAPER NUMBER

1652

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 09/991,211 | Applicant(s) BENSON, TIMOTHY E. | |
| | Examiner David J Steadman | Art Unit 1652 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-46 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Status of the Application

- [1]** Claims 1-46 are pending in the application.
- [2]** Applicants' cancellation of claims 47-53 in the transmittal letter, filed November 21, 2001, is acknowledged.
- [3]** Receipt of an information disclosure statement, filed April 08, 2002, is acknowledged.
- [4]** It is noted that the filing receipt indicates only a single inventor (Benson, T.) for the instant invention, however, the Declaration lists two inventors. It is unclear to the examiner as to which of these two documents is correct.
- [5]** The specification is objected to as applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 121 as follows: An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification (37 CFR 1.78).

If applicant desires priority under 35 U.S.C. 121 based upon a previously filed copending application, specific reference to the earlier filed application must be made in the instant application. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. _____" should follow the filing date of the parent application. If a parent

application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

Election/Restrictions

[6] Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-7, drawn to a molecule or molecular complex, classified in class 435, subclass 190.
- II. Claims 8-18, drawn to a scalable three-dimensional configuration of points, classified in class 702, subclass 27.
- III. Claims 19-20, drawn to a machine-readable data storage medium, classified in class 702, subclass 27.
- IV. Claims 41-46, drawn to an inhibitor of S. aureus MurB reductase activity, compositions thereof, and methods for making a potential modifier of S. aureus MurB activity by enzymatic or chemical synthesis, classified in class 514, subclass 789.
- V. Claim 21, drawn to a method for obtaining structural information about a molecule or a molecular complex, classified in class 702, subclass 27.
- VI. Claim 22, drawn to a method for homology modeling, classified in class 702, subclass 27.
- VII. Claims 23-28 and 40, drawn to a computer-assisted method for identifying a potential modifier of S. aureus MurB reductase activity, classified in class 702, subclass 27.

VIII. Claims 29-34 and 40, drawn to a computer-assisted method for designing a potential modifier of S. aureus MurB reductase activity, classified in class 702, subclass 27.

IX. Claims 35-40, drawn to a computer-assisted method for designing a potential modifier of S. aureus MurB reductase activity de novo, classified in class 702, subclass 27.

[7] The inventions are distinct, each from the other because:

[8] The molecule of Group I, the three-dimensional configuration of points of Group II, the machine-readable data storage medium of Group III, and the potential modifier of Group IV each comprises a chemically and/or structurally distinct entity capable of separate manufacture, use, and effect.

[9] The molecule of Group I and the method of Group V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the molecule can be used in the biosynthesis of uridine diphospho-N-acetylglutamic acid.

[10] The molecule of Group I is unrelated to the methods of Groups VI-IX as it is neither made nor used by the methods of Groups VI-IX.

[11] The three-dimensional configuration of points of Group II and the method of Group V are related as process of making and product made. The inventions are

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distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the three-dimensional configuration of points of Group II can be made using structural information obtained by NMR spectroscopy.

[12] The three-dimensional configuration of points of Group II is unrelated to the method of Group VI as it is neither made nor used by the method of Group VI.

[13] The three-dimensional configuration of points of Group II and the method of Groups VII-IX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the three-dimensional configuration of points of Group II can be used as a biosynthetic catalyst for the addition of glycine residues to a nascent peptide chain.

[14] The machine-readable data storage medium of Group III is unrelated to the methods of Groups V-VI as it is neither made nor used by the method of Groups V-VI.

[15] The machine-readable data storage medium of Group III and the methods of Groups VII-IX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product

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(MPEP § 806.05(h)). In the instant case, the molecule can be used as a biosynthetic catalyst for the addition of glycine residues to a nascent peptide chain.

[16] The inhibitor of Group IV is unrelated to the methods of Groups V-VI as it is neither made nor used by the methods of Groups V-VI.

[17] The inhibitor of Group IV and the methods of Groups VII-IX are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the inhibitor can be used as an affinity reagent for the purification of an S. aureus MurB reductase.

[18] MPEP § 803 sets forth two criteria for a proper restriction between patentably distinct inventions: (A) The inventions must be independent or distinct as claimed and (B) There must be a serious burden on the examiner. As shown above, each of the inventions of Groups I-IX are independent or distinct, thus satisfying the first criterion for a proper restriction. MPEP § 803 additionally states that a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation either separate classification, separate status in the art, or a different field of search. Each of the inventions requires a separate patent and non-patent literature search requiring a different text search for each Group and thus, co-examination of the inventions of Groups I-IX would require a serious burden on the examiner.

[19] Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

[20] Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

[21] It is noted that claim 40 has been included in multiple groups. The claim will be examined only to the extent that it reads on the elected subject matter.

Rejoinder

[22] The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

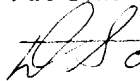
Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Steadman, whose telephone number is (571) 272-0942. The Examiner can normally be reached Monday-Friday from 7:30 am to 4:00 pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Ponnathapura Achutamurthy, can be reached at (571) 272-0928. The FAX number for submission of official papers to Group 1600 is (703) 308-4242. Draft or informal FAX communications should be directed to (571) 273-0942. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Art Unit receptionist whose telephone number is (703) 308-0196.

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David J. Steadman
Patent Examiner
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